

and can provide the necessary location information.
(6)

Access to TTY devices.

- Many cellular carriers currently provide access to emergency services through the Public Switched Network. Suggests that cellular carriers should be permitted to provide handsets compatible with TTY devices in response to customer demand. (10)

Labelling.

- The proposed establishment of specific standards and requirements for mobile enhanced 911 equipment manufacture, importation, and labelling is unnecessary, premature, and costly. Submits that the best types of E-911 technology have yet to emerge as market demand becomes clear, and manufacturers will design the equipment accordingly. (11)

Funding.

- The FCC must consider an appropriate cost recovery mechanism for mobile service providers. Suggests copying existing practice of subscribers and 911 service agencies compensating phone companies for 911 services, or mechanisms for specialized public service programs, such as Telecommunications Relay Service. (9)

Grade of Service.

- Supports investigating technical solutions to minimize blocking of 911 calls from cellular handsets, and not imposing federal standards at this time. Agrees with FCC that cooperation between call initiating, interconnecting, and terminating systems is required. (9-10)

SBC COMMUNICATIONS & SOUTHWESTERN BELL MOBILE SYSTEMS

Interest: Cellular carrier.

Wireless-Related Issues:

General.

- Cellular carriers have a long history of voluntarily providing access to emergency services (e.g. *999) where 911 is unavailable. (1-2)
- The Commission should not make wireless 911 have the same features as wireline 911 if this will raise the cost of wireless 911 service beyond what the general public can afford. (3-4)
- Wireless E911 should only be required when a municipality makes a bona fide request for such capabilities.
 - Many areas in the United States (especially rural areas) do not yet have wireline E911 or even ordinary 911. (5-6)
 - Localities should be allowed to determine how to spend their public safety dollar. Given other needs, wireless E911 might be a low priority. (6-7)
- Rather than set firm deadlines for the deployment of various E911 features, the FCC should adopt general base criteria based on current technology, and allow cellular providers, PSAPs and equipment manufacturers to develop standards for future technology. (7-9)
- The FCC need not mandate a grade of service requirement because the competitive marketplace will result in a high grade of service. (9-10)
- Whatever standards are ultimately adopted must be uniform so that roamers will not be shut out of other systems. (23-24)
- There is a possible conflict between these rules and the Communications Assistance for Law Enforcement Act in that that Act seemingly prohibits a carrier from disclosing caller location information except pursuant to a court order. (25-26)

Availability of 911 to service-initialized handsets.

- One year time frame is realistic. However, the rule must clarify how wireless 911 calls made in areas where wireline 911 is unavailable are to be handled. (9)

Need to press SEND.

- The rules should clarify that "dialing 911 only" means dialing 911 and pressing SEND. (9)

911 call priority.

- Because RF channels are assigned prior to dialed digit analysis, and switch vendors are unwilling to commit to equipment which prioritizes calls, the one year time frame is unrealistic. (10)

Provision of location information.

- Wireless ALI requirements should not be adopted at this time because the necessary locator technology is currently unavailable and there are three cellular signalling standards which must be integrated with this as yet to be invented locator technology. Rather, the FCC should allow the industry to develop its own ALI standards and implement this technology when it is economically feasible to do so. (10-14)
- Phase 1: Because of the large variances in cell site coverage area and handoffs, it is impractical to route a 911 call to the PSAP nearest the mobile caller. However, within the one year proposed by the rule, wireless carriers could instead route 911 calls from each base station to the PSAP agreeing to accept that station's calls. (14-16).
- Phase 2: Because signal strength is an unreliable means of determining a caller's distance from a base station, and the Commission has failed to specify which "other method" can be used to calculate this information, Phase 2 requirements should be eliminated. (16-17)
- Phase 3: Because none of the locator technologies listed in the Driscoll Report are currently economically and technically feasible for use as an adjunct to cellular service, Phase 3's mandatory time frame should be eliminated. Rather, the wireless industry, the emergency services industry

and equipment manufacturing industry should work together to promulgate standards. Technology based on these standards should then be field tested prior to deployment. (17-19)

Re-ring/call back.

- Although cellular carriers may have the ability to send mobile identification numbers to PSAPs within 3 years, transfer of the temporary local directory number of roamers presents technological problems. Therefore, this requirement should await development of industry standards. (20)

Common channel signalling.

- Requiring wireless common channel signalling within 3 years is a mistake for a number of reasons: First, because the vast majority of all wireless 911 calls are made by passers-by, line subscriber information is useless. Second, it will be very expensive to implement this feature. Finally, the sudden and untested implementation of wireless common channel signalling might decrease network reliability. (20-23)

Access to TTY devices.

- SBC anticipates that wireless TTY calls will be processed in a fashion similar to wireline TTY calls, either through a TTY relay service or adaptations made by the PSAP. (23)

Labelling.

- Labelling requirements are inappropriate and inequitable in that they might mislead a user into believing that landline 911 service is available in areas where none is, and such labelling is not required on public phones where 911 service is not available. (23-24)

Other Issues:

Liability.

- Wireless providers should be given the same immunity from suits arising out of problems with 911 service as are LECs. (24-25, 27)

Preemption.

- These rules should preempt state regulation to the extent the rules interfere with the FCC's goal of nationwide wireless/wireline E911 compatibility.
(26-27)

SAN JUAN COUNTY

Interest: E911 Coordinator for rural county.

Other:

- E911 compatibility cannot occur without federal standards. The marketplace is too competitive to expect consistency. (1)
- Supports the APCO/NENA/NASNA position regarding E911 standards. (1)
- The Commission should rule decisively to establish that communications manufacturers need to accommodate E911 systems by their designs and products throughout the United States. (1)

THE SECRETARY OF DEFENSE

Interest: Department of Defense and Executive Agent of the National Communications System

PBX-Related Issues:

Other

- Opposes any rule that would require connection of military installations to a PSAP and any rule that would require those installations that do connect to a PSAP to provide all E911 information. The Commission should recognize the unique situation of military installations and that the most important consideration is the achievement of the installation's military mission. Accordingly, section 68.106(f) should state that "This requirement shall not apply to Department of Defense installations." (8-12)

Wireless Related Issues:

911 call priority

- Assigning mobile 911 calls the highest priority could adversely affect national security emergency preparedness and disaster response. During a disaster or emergency, callers may dial 911, thereby blocking other callers. This will interfere with emergency response activities which plan on using mobile phones to direct response/recovery efforts. (3-5)
- It does not make sense to assign calls to the PSAP with a higher priority than the PSAP itself receives under the TSP restoration and provisioning rules. Moreover, the proposal would appear to give the mobile 911 caller a greater priority than the landline caller. (5-6)
- The Cellular Priority Access Subgroup is developing a report on the possibility of a uniform cellular priority access scheme. The Manager of NCS will consider the report and possibly file a Petition for Rulemaking to have the recommendations adopted. The Commission should realize that groups are attempting to reach consensus on the priority issues (7-8)

Other Issues:

Preemption

- It is essential that the Commission preempt any potentially conflicting state regulations. (12-13)

SIEMENS ROLM COMMUNICATIONS, INC.

Interest: Manufacturer of PBX systems.

PBX-Related Issues:

Timing of compliance.

- Compatibility will further require that enhancements to the appropriate network interfaces (wireless system-to-tandem office, 911 tandem office-to-PSAP) be agreed, standardized and deployed. The imposition of a requirement on the wireless system alone will accomplish no benefit to the users. Believes that the proposed one year time frame for compliance by manufacturers is overly aggressive given the time required to develop and deploy such network interface standards. The time frame should be set within the context of a coordinated resolution to all of the issues that stand in the way of providing E-911 to users. (3)

Reach 911 without initial "9".

- Agrees that Multi-line telecommunications systems ("MLTS"), including those provided by local exchange carriers, should properly route emergency calls dialed using digits "911" or "9-911." Adoption of this rule would conflict with the use by the public network of any sequence of dialed digits beginning with "11." Recommends that the use of "11" be abolished in order to prevent misrouting of calls to PSAPs. (3-4)

Labelling of non-compliant equipment.

- The proposal to require labelling of PBX equipment to describe its limitations with regard to E-911 needs to be clarified. While many MLTSs by themselves may not comply with some or all of the E-911 requirements, the MLTS in conjunction with adjunct equipment can satisfy all requirements. Thus, if the FCC requires labelling of MLTSs that do not themselves meet such requirements, the labelling should identify the adjunct equipment necessary and state the degree to which the MLTS and adjunct equipment combination meets the requirements. (3)
- Requiring the compliance of the MLTS by itself as a condition of registration is unnecessary and could be economically disadvantageous to both users and vendors of MLTS. (3)

Other.

- Believes that E-911 should be available to everyone regardless of whether they are served by a single telephone, a PBX or a key telephone system. (1)
- The use of the term "MLTS" is an industry standard and should be used instead of "PBX" throughout the FCC's Notice. (1)
- Recommends that information presented to PSAPs, the structure of the ALI database, and the minimum required MLTS signaling protocol should be standardized across the U.S. for MLTS sites that require E-911 trunks. Further believes that the FCC Part 68 is not an appropriate place for this standardization; it should be pursued in a standards-making body, such as TIA or T1. (2)
- Recommends that ALI database maintenance be standardized across the U.S. in both private and public sectors of telecommunications so that coordination procedures to ensure accurate and timely transmission of database information by MLTS owners to the local exchange carriers can not only be accurate, but also performed in a cost-effective manner. The proposed procedure should be streamlined or an MLTS should not be prohibited from maintaining its own local ALI database and transmitting location information during an emergency call. (2-3)
- Agrees with the recommendation of TSB103 to standardize data link interfaces between the MLTS and ALI database management system. (3)
- The FCC rules should not mandate unnecessary ALI capabilities in small applications. In these cases, a single line interface for emergency calls should be allowed or the capabilities of the 911 tandem offices should be expanded to allow the correct routing of 911 calls to other jurisdictions. (5-6)

Wireless-Related Issues:

Scope of requirement (covered and excluded services).

- Recommends that the rules be restricted to licensed common carriers, such as licensed PCS and cellular services, rather than extended to all CMRS providers. Concerned that the rules might be construed to apply to wireless MLTS deployments operating in the "tenant service" mode. (4)

- The application of sophisticated technological measures to interpolate user location between radio ports may provide little or no benefit to the user of a wireless MLTS, as compared to that provided by the user of a licensed common carrier. (4)
- There will be inherent barriers to access of a wireless MLTS, including incompatibilities of air interfaces, layered operational protocols, and security characteristics, that will impede easy access to 911 services by non-registered handsets. (4)
- A wireless MLTS can direct calls only to pre-registered handsets; a call-back attempt by the PSAP to return an emergency call to a non-registered handset will fail to connect with that handset. (4)
- Further proposes that the regulations regarding wireless MLTS should be developed in such a way as to allow a wireless MLTS to support the requirements placed on MLTS generally, rather than to force a single 911 standard on both licensed and unlicensed wireless systems. (5)

Provision of location information.

- It is premature to fix a schedule to mandate precise in-building location until a technically feasible approach is proposed. (5)
 - Network-based location systems seem to be limited to 100 foot precision in non-urban settings, and accuracy is degraded in dense urban environments. (5)
 - The cost of network-based systems, at the low end, is quoted at \$10,000 per base station. For comparison, a typical wireless MLTS radio port costs approximately \$1,000. (5)
 - External radiolocation networks, such as GPS, are not applicable to in-building locations; they would require supplementary systems, such as handheld direction finding devices. (5)

Labelling.

- Recommends that any FCC mandated labelling requirements be succinctly worded in order to properly fit on a wireless handset. (6)

SMITH ADVANCED TECHNOLOGY, INC. (SAT)

Interest: Inventor of the Roving Automatic Location Identification (RALI) system which provides wireless ALI through the use of GPS.

Wireless-Related Issues:

General.

- At minimum, wireless E911 should provide all of the features called for in the PCIA, APCO, NENA and NASNA Emergency Access Position Paper. (18)

Scope of requirement (covered and excluded services).

- RALI is compatible with cordless telephones, satellite services and all CMRS, including PCS. (12, 15, 16)
- Because only services capable of contacting emergency service providers should be within the scope of these rules, satellite data services should be excluded. (18)

Need to press SEND.

- Believes that 9-1-1 SEND should be the standard dialing pattern. (15)

911 call priority.

- RALI will have no adverse impact on the implementation of cellular call queuing and call priority. (17)

Provision of location information.

- RALI provides latitude and longitude data which a PSAP can input into a mapping program to produce a street address. (7, 10)
- Although dependent on the Department of Defense's (DOD) control of the GPS system, RALI's location accuracy is between 30 and 100 meters. (10)
 - State and local governments might persuade DOD to upgrade the commercial GPS signal. (12-13)
 - The use of reference receivers would improve GPS accuracy to under 30 meters. (13)

- When used in conjunction with PCS and inside buildings (where GPS is ineffective) RALI will utilize the PCS transmitter for location information. (10-11)
- In order to achieve economies of scale, a single location technology should be chosen as the national standard. (16)
- Although RALI can be up and running in 6 months (including the retrofitting of existing handsets), 2 to 3 years is a reasonable phase-in period. (18)
- The mobile carrier should be required to pass latitude, longitude and altitude information to the PSAP. (19)

Re-ring/call-back.

- RALI provides ANI through transmission of the user's number (programmed into the RALI system) to the PSAP. (7)

Access for TTY devices.

- RALI is transparent to TTY devices and can be equipped with an RJ11 port for a wireline device interface. The only impact on TTY's is a 500 millisecond interruption of the audio portion of the call during location updates. (12, 21)

Other.

- If a "RALI router" is installed at either the PSTN tandem switch or the ALI database, RALI is capable of selective routing of 911 calls to the PSAP nearest the caller. (7-9)
 - This is the only change that needs to be made to the PSTN. (17)
- Because each RALI mobile unit carries and transmits its own ALI and ANI data, the need for database maintenance is eliminated. (11)
- Customer awareness and education concerning RALI should be the responsibility of the local public safety agency and the wireless provider. (11)
- Because RALI interfaces with existing PSAP equipment, this equipment will not have to be changed. (11)

- The estimated implementation costs of RALI will be distributed among all affected entities as follows: Cellular customer = \$50/new phone, \$200/retrofit phone; PSAP = less than \$40,000; PSTN = minimal. Therefore, no single entity will be disproportionately burdened with implementation costs. (13-14, 19, 20)
- RALI has already undergone successful field trials in New Jersey. (14)
- Imbedding the RALI chip-set in mobile devices will only increase the device size by 1.25 cubic inches. (19)
- The impact of RALI on SS7 is the same as any wireline application. (21)

Other Issues:

Privacy.

- RALI provides for privacy in that wireless device identification and location information is provided only as authorized. (12)

STANFORD TELECOMMUNICATIONS, INC.

Interest: Designer of navigation systems and other tracking devices.

Wireless-Related Issues:

Provision of location information.

- Stanford Telecom has designed a navigation system, "NAVCELL" to satisfy the 911 position location requirements. NAVCELL will work with FDMA (AMPS), TDMA and CDMA cellular systems within the same bandwidth of operation. (1)
- NAVCELL transmits a spread spectrum ranging signal from each cellular base station. The receiver in the cellular phone computes its position in a manner similar to GPS, using the received ranging signal from the nearest cell base station site, and the ranging signals from up to six adjacent cell sites. NAVCELL locations are from fixed locations rather than moving satellites, making computation easier than GPS, and provides an accurate position inside and outside buildings, everywhere a cell matrix structure exists. (1)
- Because the ranging signals are spread spectrum signals, requirements for power per unit of spectrum are well below communications requirements, causing no interference with coexisting communications signals. The NAVCELL receiver design eliminates concern of strong communications signals transmitted from a nearby cell site interfering with weaker ranging signals transmitted from adjacent cell sites, and the NAVCELL design time gates the ranging signals in a non-interfering manner so that the navigation signals do not interfere with each other. (1)
- NAVCELL uses a fixed bandwidth approximately 2 MHz wide in each cell. (2)
- Each communication cell base station site transmits the relevant adjacent cellular base station positions with time slot allocations and other NAVCELL information. Seven cell sites can typically be simultaneously addressed. The information is transmitted on both the base station communication control channel and as a message on the ranging signal. The mobile station position for 911 is transmitted from the cellular portable phone to the MTSO via the control channel, remodulated into the PSTN via a modem, and transmitted to the emergency service center. (2)

- Because the existing cellular control infrastructure is used to transmit NAVCELL data, minimal modification to the cellular infrastructure is caused and the cost to the cellular phone is little more than a chip set. (2)
- Implementation of the NAVCELL infrastructure requires each base station site to include a NAVCELL spread-spectrum signal transmitter and a GPS receiver for time synchronization. NAVCELL transmitter power is less than 1/100th of the base station transmitter power. (2)
- After the NAVCELL infrastructure is in place, all other cellular position-dependent services can be provided. (2)
- The requirement for knowing the floor of a building is an enhancement for NAVCELL, and is satisfied by using RF signposts as required. (2)

STARSYS GLOBAL POSITIONING INC.

Interest: Charter applicant for authority to establish a satellite system in new Non-Voice, Non-Geostationary Mobile Satellite Service (NVNG MSS).

Wireless-Related Issues:

Scope of requirement (covered and excluded services).

- Neither NVNG MSS system operators nor entities that provide NVNG MSS capacity to end users should be within the scope of these rules. (1)
 - Because NVNG MSS is not a voice service, PSAP operators can not interrogate the end user. (2-3)
 - NVNG MSS systems are incompatible with ANI databases and have limited messaging capacity. (3-4)
 - NVNG MSS systems will be processing messages from up to 3,000 miles away, thereby making them fundamentally incompatible with local E911 services. (4-5)

STATE OF CALIFORNIA DEPARTMENT OF CORRECTIONS

Interest: Public safety agency responsible for 29 state prisons

PBX-Related Issues:

Other

- The Commission should exempt prison telephone systems from all aspects of compatibility with enhanced 911.
- Prisons are well equipped to handle the initial response to any emergency that might occur. (2)
- Calls into and out of a prison are controlled. One half to three quarters of the lines cannot make or receive an outside call and therefore could not call 911. (2)
- Requiring that all lines be available to ANI and to geographical location information would be impractical and antithetical to ensuring prison security. (2)
- If emergency vehicles arrived at a prison, they would not be allowed entrance into the prison. (2)
- Inmate telephone systems should also be exempt from the proposal. These phone systems are collect only, are not routed through the PBX, and are blocked from dialing 911. (3)
- If outside help is needed, prisons have mutual aid agreements with local public safety agencies and hospitals. Fire, police or ambulance services can be obtained through these agreements. Prisons do not dial 911 to reach these agencies. (4)

STATE OF WASHINGTON

Interest: State

Other:

- The degradation of enhanced 911 service is a serious problem. The APCO/NENA/NASNA position regarding the Commission's rules will allow the degradation of enhanced 911 services to be minimized. (2-3)
- There are advances in network architecture and signaling protocols that can be utilized for compatibility. Supports the positions taken at the TIA/PCIA/APCO/NENA/NASNA Wireless Joint Experts meeting in October 1994. (3)
- A mandate under the APCO/NENA/NASNA position will support increased competition. (3)
- The Commission should set the tone that the communications industries must consider the effects of their designs and products on enhanced 911 systems, and that they must work with the public safety association to implement standards that provide for universal access to fully featured enhanced 911 systems. (3)

PBX owner's obligation to update LEC

- PBX owners should be required to transmit updated location information to LECs on a timely basis. Although standard data link interface could help control PBX costs and assure nationwide compatibility, the Commission should recognize that users may wish to employ other means of transferring updated data, such as mainframe-to-mainframe communications. (7)

Definition of emergency service location

- TCA seeks clarification that the Commission is not requiring each telephone to be considered an emergency response location, but that all telephones that are in close enough proximity to permit effective emergency response if assigned the same identifications should be considered the same emergency response location. (7)

Training of PBX owner personnel

- The training requirements for verification personnel would impose substantial and unwarranted costs on PBX owners. As an alternative, the E911 verification procedure should be part of a vendor training program. Anyone who has completed the program, or who has six months experience performing installation and verification procedures under the guidance of a trained supervisor should be permitted to perform the verification functions. (8-9)

P.01 Grade of Service

- The requirement that users have sufficient E911 trunks to maintain an availability of P=.01 based on the number of users served is unnecessary and prohibitively expensive. The requirement would require dozens of dedicated E911 trunks for a building that serves several hundred users. The Commission should allow users reasonably to determine how many trunks to utilize. (9)

Other:

Preemption

- The Commission should preempt state regulation of PBX/E911 compatibility. Uniform federal requirements will ensure nationwide compatibility of enhanced 911 systems. (9-10)

TELECOMMUNICATIONS FOR THE DEAF, INC.

Interest: Organization representing deaf and hard of hearing Americans.

Wireless-related issues:

Access to TTY devices.

- If a TTY user calls 911 from an area which has E911, ANI/ALI should be recorded before the call is transferred to a TTY designated extension. (2)
- The rules should require that PSAPs utilize equipment which quickly identifies incoming TTY calls as such. (3)
- In order to give TTY users access to a level of 911 service which is functionally equivalent to that provided to voice users, the Commission should require that 911 providers utilize real-time transmission of typed text with interrupt/VCO/HCO capabilities. (4)
- Would like the Commission to clarify precisely what sort of access to wireless services TTY users need be provided. (5)
- Suggests that TTY users greatly benefit from a requirement that mobile radio units have an RJ11 jack for direct input. (5)
- Regulations should not impair the development of improved, future TTY technologies. (6)

notice of compliance may be all that is necessary.
(19)

P.01 grade of service

- Grade-of-service requirements are entirely inappropriate for 911 calling because of the uniqueness of 911 traffic patterns. The probability of simultaneous 911 calls not associated with a common disaster is incredibly small. (14)

Other

- Part 68 should not require that equipment itself be inherently capable of transmitting caller CESID as a condition of registration. Instead, the Commission should require manufacturers to demonstrate how Enhanced 911 Calling Service compatibility can be achieved and ensure that the installation instructions identify such scenarios. (18)
- The signal power limits are appropriate but TIA TR-41 is evaluating those limits. (19)

Wireless-Related Issues

General

- The wireless industry has been working hard to overcome technical challenges to compatibility. (21)
- The mobile nature of wireless communications and the unique characteristic of RF propagation will require modification of existing emergency service systems and local exchange interconnect networks, as well as the development of special capabilities in wireless systems. (21)
- TIA has done a lot of work toward the goal of compatibility. The Joint Experts Meeting ("JEM") Reports demonstrate the commitment of the wireless industry to work towards compatibility, and highlights the unreasonableness of mandating design requirements rather than performance standards, and setting deadlines rather than allowing the orderly progress toward the ultimate goal of compatibility. (22)

Other Issues:

Preemption

- Federal regulations should supersede state and local regulations to the extent that federal regulations can prevent incompatibility problems. (5)

Other

- Federal regulations are necessary to assure uniform deployment of Enhanced 911 Calling Services nationwide. The regulations should assign responsibility for activities necessary to assure that E911 services function properly. This requires a cooperative effort from all aspects of the industry. (5-6)
- The accuracy of the Public Safety agency database is critical to the successful operation of Enhanced 911 Calling Service. The MLTS owner or CMRS provider must be responsible for proper maintenance of that database. Information must be protected by the FCC's CPNI rules. The database maintenance responsibilities should be covered in a FCC Rules Section other than Part 68. (7)
- The docket should be split to address MLTS and CMRS issues separately. (7)
- Provides definitions of Enhanced 911 Calling Service, Selective Routing, Public Safety Answering Point (PSAP), Enhanced 911 Calling Service Compatibility, Caller's Emergency Service Identification Number, Multi-Line Telecommunication System, Dispersed Private Telephone System, and 911 Centralized Automatic Message Accounting Trunk. (8-11)
- Due to the increasing number of situations requiring CESID assignment, it is not clear that current CESID field length has sufficient capacity to accommodate all scenarios. The long-term objective should be to expand the maximum number of allowable CESID digits. (13)
- Because some states have passed or will pass regulations that will mandate retrofitting, appropriate requirements should be developed at the federal level. There are cases where requiring modifications would be inappropriate, such as in areas where Enhanced 911 service is not available

or where the benefits do not outweigh the burden.
(14)

- The labeling of equipment would create confusion and provide no real benefit to the user. It is more reasonable to require that equipment installation and use instructions provided by the manufacturer indicate how the equipment can be configured to support E911 services, or indicate that it cannot, or that it can only do so with adjunct equipment. Any instructions unique to the installation could be supplied by installer. (15)
- The responsibilities for maintaining the PSAP database must be clearly assigned and may vary on a case-by-case basis. It seems reasonable to specify a maximum time interval for updating the database to reflect changes. (16)
- Call-back numbers have limitations. Some MLTS installations do not permit Direct-Inward-Dialing to stations. For these installations it is necessary to assign CESIDs that are not valid call-back numbers. Similarly, for CMRS 911 callers, the transmitted CESID might not be the caller's telephone number. The assignment of these CESIDs must be coordinated with the LEC, and the PSAP database should identify which CESIDs are non-valid-call-back numbers. (16)
- The activation of features such as call-forwarding, night-transfer, and do-not-disturb, whether by MLTS equipment or as a network service offering, can create caller location and call-back problems. (17)
- The International Telecommunication Union recently adopted a data modem standard, v.18, that provides compatible operation of all known text telephone. As v.18-compliant modems become available, text telephone users will be able to communicate more easily and reliably with 911 emergency services.
(17)

TELIDENT

Interest: Engaged in research, development, design, manufacture and sale of E911 telecommunications equipment

PBX-Related Issues:

Ability of PBX to pass calling number and location identifier

- Electronically fixing the MLTS is only the first step to making MLTS work properly with E911. The Commission should also consider the following issues: (3)
 - The interface and trunking standards which "electronically fixed" MLTS systems interface to the local Telco's E911 network. (3)
 - The mechanisms an MLTS administrator should use to provide CESID to ALI data information to the E911 location database maintenance organization. (4)
 - The charges that will be applied for this data input and storage and whether or not the CESID/ALI data provisioning mechanism will be a manual or automated process. There should be no additional charges for data base access since the MLTS user is already paying for access to an E911 system. (4)
 - Whether the ALI database maintainer should require the MLTS system administrator to provide data on all DID numbers that are in service as well as those reserved for expansion. Requiring MLTS operators to pay to reserve data space for future deployment is unnecessary. (5)
 - Whether the ALI database maintainers should be permitted to charge an extra per DID charge for the maintenance of these DID records in the ALI database. (5)
 - Whether the local Telco should be permitted to charge a MLTS operator to rent a "CESID artificial DID", when it will be used only for the purpose of E911 call routing and ALI data retrieval. (6)